

CANCER SCIENCE INSTITUTE OF SINGAPORE IN THE SPOTLIGHT

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Tocotrienols: The Unsaturated Sidekick Shifting New Paradigms in Vitamin E Therapeutics. (*Drug Discov Today*, Aug 2017)

Tocotrienols have a wide range of positive biological activities such as anti-inflammatory, antioxidant, anticancer, skin protection benefits and more. Now, Dr Alan Prem Kumar's team has provided a comprehensive analytical update on novel therapeutic possibilities of tocotrienols in a variety of inflammation-driven illnesses.



IN THIS ISSUE

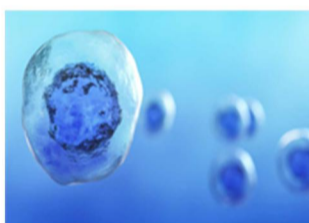
Tocotrienols: The Unsaturated Sidekick

Reactive Oxygen Species and Mitochondrial Homeostasis

PPAR γ Ligand-Induced Annexin A1 Expression Determines Chemotherapy Response

Reactive Oxygen Species and Mitochondrial Homeostasis as Regulators of Stem Cell Fate and Function. (*Antioxid Redox Signal*, July 2017)

The specific role and influence of reactive oxygen species (ROS) in stem cells remains of notable interest. These are vital for lifelong tissue equilibrium and regeneration which are influenced by ROS levels. Prof Toshio Suda and his PhD student, Darren Tan, have studied the intricate connections between mitochondria, cellular metabolism and redox homeostasis to impart a deeper understanding of ROS in stem cell biology.



UPCOMING EVENTS

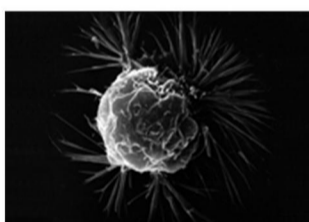
CSI Seminar
Gang Huang
2 October 2017

RNA Analysis Workshop
3 October 2017

RNA Biology Symposium
5 October 2017

PPAR γ Ligand-Induced Annexin A1 Expression Determines Chemotherapy Response via Deubiquitination of Death Domain Kinase RIP in Triple Negative Breast Cancers. (*Mol Cancer Ther*, Aug 2017)

The incidence of breast cancer has been increasing globally. In this study led by Dr Alan Prem Kumar, his group proposed a novel schematic model to explain the mechanism of how PPAR γ activation leads to cell death in Triple Negative Breast Cancer (TNBC) through the actions of Annexin A1 (ANXA1) and RIP1. Drug-induced ANXA1 expression mediates actions of PPAR γ ligands in promoting cell apoptosis and ANXA1 could serve as a clinically helpful alternate biomarker for treatments in future experiments.



CSI SINGAPORE CONGRATULATES...

CSI Staff Awarded at NUSMed Awards Ceremony 2017

Congratulations to Prof Chng Wee Joo, Dr Polly Chen and Dr Alan Prem Kumar, who received awards at the NUS Medicine (NUSMed) Awards Ceremony on 14 July! Prof Chng was awarded the Researcher of the Year and Dr Polly Chen received the Young Researcher of the Year award. Dr Alan Prem Kumar was conferred the Yong Loo Lin School of Medicine Graduate Student Mentor of the Year (GRAMAY) award.

